

ABSTRACT

The present invention provides a surface-mount SAW device configured to prevent sealing resin layer coated all over the top surface of a piezoelectric substrate from becoming charged even if the piezoelectric substrate forming the SAW device is made of a pyroelectric material. The SAW device is composed of: a mounting substrate 2; a SAW chip 15 provided with a piezoelectric substrate 18, an IDT electrode 17 formed on one surface of said piezoelectric substrate, and connection pads 16 connected via conductor bumps 10 to conductor traces 5; and a sealing resin layer 21 coated all over the outer surface of the SAW chip flip-chip mounted on the mounting substrate and extended down to the top surface of the mounting substrate to define an airtight space S between the IDT electrode and the mounting substrate; wherein the crystal structure of the piezoelectric substrate belongs to any one of point groups C_1 , C_2 , C_s , C_{2v} , C_4 , C_{4v} , C_3 , C_{3v} , C_6 and C_{6v} in terms of Schoenflies symbols; characterized in that the conductivity of the piezoelectric substrate is increased to suppress charging of the sealing resin layer.